ogy-Oncology Ward. Dose adjustment was the most frequent active interventions in the general settings, whilst drug addition constituted the most common active interventions on the Hematology-Oncology Ward. The degree of acceptance of pharmacists' intervention by physicians was high (90% for active interventions). There were three variables significantly predicting the intervention acceptance, namely patients' age (OR = 0.893; 95% CI 0.813, 0.981), non high-risk medication category (OR = 2.801; 95% CI 1.094, 7.169), and pharmacists' experience (OR = 1.114; 95% CI 1.033, 1.200).
CONCLUSIONS: The rate of pharmacists' active interventions documented on Hematology-Oncology Ward was higher than the general medical and surgical wards. The pattern of the interventions documented on Hematology-Oncology Ward was also different compared to that of other wards. The interventions involving younger patients, addressing non high-risk medication related problems, being recommended by more experienced pharmacists were associated with increased likelihood of acceptance by physicians.

410. Evaluation of preoperative antimicrobial prophylaxis in select neonatal intensive care unit surgeries. *Ashley Byrne, Pharm.D. Candidate 2015*[1], Mary Petrea Cober, Pharm.D., BCNSP[2]; (1) College of Pharmacy, Northeast Ohio Medical University, Rootstown, OH; (2)Akron Children's Hospital, Akron, OH
PURPOSE: The objective of this study is to evaluate the use of preoperative antimicrobials within a neonatal intensive care unit (NICU) and compare these results to current guidelines developed by the American Society of Health System Pharmacists in conjunction with Infectious Diseases Society of America (IDSA), Surgical Infection Society (SIS), and the Society for Healthcare Epidemiology (SHEA).
METHODS: Medical records of 97 surgical procedures performed on NICU patients between April 1, 2012 and November 30, 2013 were reviewed. Each patient's weight, age, serum creatinine, surgical procedure, date of surgery, attending surgeon, surgical service, antimicrobial agent and dose used, and number of doses continued postoperatively was documented. Only patients receiving ventricular-peritoneal (VP) shunt placement, ventricular access device (VAD) placement, VP shunt revisions, gastromy-tube placement, necrotizing enterocolitis(NEC)/bowel resection, patent ductus areteriosus (PDA) ligation, and congenital heart repairs were included in this study.
RESULTS: Ninety-seven surgeries were performed and evaluated: general surgery (65.3%), cardiothoracic surgery (21.7%), and neurosurgery (13%). Correct antimicrobial prophylaxis was provided in 23.7% of these cases: 15 out of 43 general surgeries (35%), 5 out of 37 cardiothoracic surgeries (14%), and 3 out of 18 neurosurgeries (18%). Within cardiothoracic surgeries, the remaining 86% were prophylaxed with cefepime, a fourth generation cephalosporin.
CONCLUSIONS: Cardiothoracic surgery has established set guidelines for prophylaxis for their patients in the operating room. However, they are using too broad of an antimicrobial agent in many procedures. General surgery and neurosurgery are not providing adequate prophylaxis according to either previous or current guidelines or an established institution protocol. Institution guidelines and order protocols, as well as computerized physician order entry order sets, for each surgical service need to be developed to ensure proper antimicrobial prophylaxis is occurring before operative procedures in the NICU.

411. Possible drug-induced pancreatitis in a complicated adolescent patient post-traumatic injury. *Susan E. Dickey, B.A., Pharm.D. Candidate*[1], Leslie A. Hamilton, Pharm.D., BCPS[2], Katie J. Suda, Pharm.D., MS[3]; (1)The University of Tennessee Health Science Center, College of Pharmacy, Memphis, TN; (2)Department of Clinical Pharmacy, The University of Tennessee Health Science Center, College of Pharmacy, Knoxville, TN; (3)University of Tennessee Health Science Center, College of Pharmacy, Memphis, TN
PURPOSE: Multiple medications have been associated with acute pancreatitis. However, data in the pediatric population is scarce secondary to the nonspecific presentation and infrequent diagnosis. The aim of this report is to characterize drug-induced pancreatitis in an adolescent patient.
METHODS: This case report was conducted via chart review and was evaluated in the context of current literature regarding drug-induced pancreatitis.
RESULTS: A 16 year-old African-American female presented with a surgical site infection 8 weeks after a motor vehicle accident with multiple traumas. Two weeks prior to the present admission the patient was hospitalized for a urinary tract infection (UTI), which resolved with a 10-day course of antibiotics. At discharge the patient was initiated on sulfamethoxazole/trimethoprim (SXT) daily for UTI prophylaxis. On day seven of the present admission the patient complained of abdominal pain and rifampin, prazosin, and iron sulfate were held. The abdominal pain persisted and on day 13 the patient was diagnosed with acute pancreatitis with an amylase level of 187 units/L (normal = 30–110) and a lipase level of 987 units/L (normal = 23–208). SXT was discontinued and pancreatic enzymes declined over three days, but did not reach normal. There are several potential etiologies of acute pancreatitis in this patient, and SXT was identified as the most likely cause by the medical team. Evaluation of this case with the Naranjo algorithm indicated that SXT was a "possible" cause of the adverse drug reaction with a score of three. Other potential causes of acute pancreatitis in this patient include possible gallstones, abdominal injury, and other medications.
CONCLUSION: Acute pancreatitis can have significant morbidity and mortality in the pediatric population, but can go undiagnosed due to the lower incidence observed in children. Pediatric patients presenting with idiopathic abdominal pain should be evaluated for pancreatitis and drug therapy should be reviewed for potential causative agents.

412. Kidney function, vancomycin dosing and achievement of therapeutic troughs: a pilot observational study in pediatric oncology patients. *Alexandra Chambers, Pharm.D. Candidate*[1], Thomas D. Nolin, Pharm.D., Ph.D.[2], Denise Schiff, Pharm.D.[3]; (1)University of Pittsburgh School of Pharmacy, PA; (2) University of Pittsburgh, Pittsburgh, PA; (3)Hematology/Oncology, Children's Hospital of Pittsburgh of UPMC
PURPOSE: This study compared kidney function, vancomycin dosing, and frequency of attainment of therapeutic drug troughs between age groups in a cohort of pediatric oncology patients.
METHODS: A retrospective chart review was completed in 50 patients between the ages of 1–16 years old who received vancomycin for empiric treatment of febrile neutropenia. Patients with pre-existing kidney disease or treated with doses outside recommended ranges (15 mg/kg/dose every 6 hours age <12 years; 15 mg/kg/dose every 8 hours ages 12–16 years) were excluded. Patients were stratified by age: toddlers (12–36 months), early childhood (EC, 2–5 years), middle childhood (MC, 6–11 years), and adolescence (12–18 years). Kidney function was calculated using the Bedside Schwartz equation. Vancomycin troughs were categorized using IDSA/ASHP definition of "therapeutic" of 10–15 mcg/mL. Descriptive statistics were calculated, and groupwise comparisons were made using one-way analysis of variance (GraphPad Prism v5.0f).
RESULTS: No statistically significant differences in calculated kidney function or in trough concentration values were observed between age groups. Vancomycin trough concentrations were subtherapeutic in all age groups except in adolescents. All patients in EC and MC age groups had subtherapeutic troughs, while 90% of toddlers had subtherapeutic troughs. Although mean ± SD vancomycin concentrations were 10.6 ± 7.4 ug/mL in the adolescent age group, only 10% of patients exhibited therapeutic trough concentrations, while 30% had supra-therapeutic and 60% had sub-therapeutic troughs.
CONCLUSIONS: Currently-recommended vancomycin dosing regimens are inadequate to achieve targeted therapeutic troughs in pediatric oncology patients. Doses exceeding 15 mg/kg/dose